

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE <b>J</b>		PAGE OF PAGES <b>1</b> / <b>1</b>	
2. AMENDMENT/MODIFICATION NO. <b>0008</b>		3. EFFECTIVE DATE <b>12-Apr-2004</b>		4. REQUISITION/PURCHASE REQ. NO. <b>W81EWF-4065-8507</b>		5. PROJECT NO.(If applicable)	
6. ISSUED BY VBURG CONSOLIDATED CONTRACTING VICKSBURG OFFICE 4155 CLAY STREET VICKSBURG MS 39183-3435		CODE <b>W912HZ</b>		7. ADMINISTERED BY (If other than item 6)  <b>See Item 6</b>		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. <b>W912HZ-04-T-0019</b>	
				X		9B. DATED (SEE ITEM 11) <b>12-Mar-2004</b>	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.</b> <b>IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Reference Request for Quote (RFQ) No. W912HZ-04-T-0019, dated 12 Mar 04. The subject RFQ is amended as follows:  The closing date for receipt of quotations is extended to 15 Apr 04, 4:45 P.M.  SEE PAGE 2 FOR CONTINUATION.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				TEL: _____ EMAIL: _____			
15B. CONTRACTOR/OFFEROR  _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA  BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED  <b>12-Apr-2004</b>	

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES****Revised Scope of Work****Temporary Barrier-Type Flood Protection Technologies  
Field and Laboratory Testing**

1. Background. The U.S. Army Corps of Engineers Engineering Research and Development Center (ERDC) has been authorized to evaluate the effectiveness, constructability, and economic feasibility of promising alternative flood fight technologies. The evaluations will be conducted through both field and laboratory testing with all testing to be completed at the Vicksburg, Mississippi site during FY 2004. The laboratory testing will be conducted at the Corps' ERDC laboratories in Vicksburg, Mississippi. The field test at Vicksburg will be conducted at a site furnished by the Government at the Vicksburg, Mississippi Harbor as shown in the photos in Section 9. Up to five additional test sites throughout the U.S. may be identified by the U.S. Army Corps of Engineers under this contract. The dates for field testing at any additional sites will be determined at a later date.

2. Test Procedures at the Vicksburg site.

a. Field Tests. Field-testing of the products at the Vicksburg site will be performed during the month of May 2004 with the possibility of extending into June 2004. The exact date is dependent on the Mississippi River stage at Vicksburg. Selected vendors may choose to preposition material at a Government furnished site in the Vicksburg, MS area. Each selected vendor will be contacted and issued a notice to proceed. If each vendor chooses not to preposition his product in Vicksburg, the vendor must have his product at the field site, ready to be installed within 4 calendar days from the time he is issued the notice to proceed. Each site will be provided with a marked 25-foot right-of-way for construction. Each barrier must be constructed within a 15-foot wide footprint for the structure within the 25-foot right-of-way. Actual right-of-way used within the provided 25-foot right-of-way will be measured and reported. The Government will install a large buried concrete tank inside each selected vendor's barrier to collect seepage water. The Government will prepare work areas at the field test site for installation of temporary barrier-type products. A random drawing will be conducted to determine which product is constructed on each area.

For field-testing, the selected vendors will be required to furnish the appropriate quantity of his flood barrier product and to deliver his product to the testing site. Each vendor's product will be installed and subsequently removed by a Government furnished labor force. The vendors will be required to have a technical advisor on site to insure that the products are properly installed and removed. The vendor's advisor will be required to certify in writing that the products were installed and removed in accordance with his on site instructions and his company's installation and removal specifications. The field test section will be in general, a u-shaped or half box shaped structure. The test section will be placed along the channel bankline and tied back into high ground. The riverward face of the structure will be a minimum 100 feet long. The length of the tie back sections could vary depending upon the river stages at which the structures will be tested but each could be as much as 50 feet long. The Government will grade to bare ground a portion of the field test site footprint for the barrier structures prior to installation of the selected vendors' products. The Government reserves the right to artificially wet the field-testing site prior to the selected vendor's installation of their products to best simulate possible real world flood fight field conditions. Each selected vendor's product must be sufficiently high to protect against 3 feet of water against the structure. The selected vendors will also be required to add 1 additional foot of protection during the testing as directed by the Government. Each selected vendor can use the method of his choice to achieve this additional 1-foot of protection.

All field-testing will be conducted by Government personnel at the testing sites. During the field-testing, the vendor shall furnish an on site advisor to observe the tests. The advisor may direct minor adjustments to the barrier during testing. The Government will furnish a 2-man crew that will be available to make needed adjustments. Rules to be followed by each selected vendor during the actual field tests will be furnished before the field-testing begins. Each structure will be evaluated for its effectiveness including seepage, ease of construction, area required to construct,

timeliness to construct, installation equipment requirements, suitability for use on uneven and/or sloping terrain, and total cost of using each structure. In the field, hydrostatic tests and hydrodynamic tests including waves and overtopping will be conducted.

b. **Field Testing – Optional Identified Sites.** The testing procedure for the optional sites will be determined when the final location of these sites has been identified by the Government.

c. **Laboratory Tests.** For lab testing, the selected vendors will be required to furnish the appropriate quantity of his flood barrier product and deliver his product to the test facility in Vicksburg, MS. Each vendor's product will be installed and subsequently removed by a Government furnished labor force at the test facility. The vendors will be required to have a technical advisor on site to insure that the products are properly installed and removed. The vendor's advisor will be required to certify in writing that the products were installed and removed in accordance with his on site instructions and his company's installation and removal specifications. Laboratory tests will be conducted independently of the field tests and may or may not be conducted concurrently with the field tests. The lab test section will be trapezoidal-shaped with approximately 30 feet along the riverward base and about 20-foot tieback section at each end. The exact shape will be furnished to the selected vendors. Each selected vendor's product must be sufficiently high to protect against 3 feet of water against the structure.

All laboratory testing will be conducted by the Government. During the lab testing, the vendor shall furnish an on site advisor to observe the tests. The advisor can direct minor adjustments to the barrier during testing. The Government will furnish a 2-man crew that will be available to make needed adjustments. The full laboratory testing protocol will be furnished to the selected vendors before the lab testing begins. The lab tests include hydrostatic, hydrodynamic including waves and overtopping, and structural debris impact testing.

### 3. Vendor Furnished Items for Field and Laboratory Testing.

- a. All flood barrier material required for both the field and laboratory tests.
- b. Any specialized tools and/or specialized equipment required to install and remove the field and laboratory test section.
- c. Any specialized tools and/or specialized equipment required to provide an extra 1-foot of protection during field-testing.

### 4. Government Furnished Items for Field and Laboratory Testing.

- a. All standard equipment and labor required to install and remove the field and lab test section. This includes machinery such as a tractor, dozer, front-end loader, etc.
- b. All instrumentation equipment.
- c. A stockpile of granular fill material for granular fill type structures.

5. Schedule. The field-testing at the Vicksburg site will be conducted during May 2004 with the possibility of extending into June 2004. The selected vendors must be ready to deliver their product to the Vicksburg, MS field test site no later than 1 May 2004. If the vendor chooses not to preposition his product in Vicksburg, MS, then the delivery must be completed within 4 calendar days from the time that the Government notifies the selected vendors that the delivery must begin. The duration of the field test is dependent upon the stages on the Mississippi River but is anticipated to last at least 2 weeks and could last up to a month or longer.

The laboratory testing will be initiated in April 2004. All lab tests will be completed by the end of FY 2004. The selected vendors will be required to deliver their products to the test facility within 7 calendar days of being directed to do so by the Government.

The schedules for the optional sites will be determined when the final location of these sites has been identified by the Government.

6. Costs. Costs of the field and laboratory testing will be the responsibility of the Government. However, the Government will reimburse each selected vendor his actual costs for labor and travel for the vendor's advisor(s) during the installation, testing, and removal of his product. The Government will reimburse for all of these costs up to but not exceeding \$25,000 total for both his field and laboratory costs at Vicksburg. The Government will reimburse the vendor for all actual costs for field testing at any additional sites identified, not to exceed \$25,000 per site. When additional sites are selected, the vendor will then be required to submit a cost proposal for each optional site.

If the Government identifies an optional site to be field tested, the Government will also purchase product required for testing purposes. Actual quantity purchased and cost of product will be determined as sites are identified.

7. Award Information. It is anticipated that two vendor products will be selected for testing. Both products will be tested in both the field and the laboratory. Results of both field and laboratory tests for each selected vendor's product will be compared to the test results for a sandbag barrier tested under identical conditions. All test results will be reported on a publicly accessible web page.

8. Content of Proposal. Each of the following criteria shall be clearly and independently addressed in each vendor's proposal, in the same order as listed below.

- (1) Documentation shall be furnished that the barrier structure can be installed and removed in the footprint defined in the scope of work for both the field and laboratory deployment. The installation and removal of the structure must be performed using whatever equipment would normally be necessary to install and remove the structure as designed. The vendor must provide enough detail to adequately define all logistical aspects including all labor and equipment requirements for the installation and removal processes. In responding to this item the vendors must cover at a minimum:
  - a. Product's physical footprint requirements (length / width / minimum turns or radius considerations) and construction right-of-way requirements for field test installation and removal
  - b. Durability
  - c. Ease of construction
  - d. Constructed of environmentally acceptable materials (Include Materials Safety Data sheets if applicable)
  - e. Time required to install at field site
  - f. Manpower required to install at field site
  - g. All equipment required to install at field site
  - h. Time required for removal at field site
  - i. Manpower required for removal at field site
  - j. Additional equipment required for removal at field site
  - k. Adaptability to varying terrain
  - l. Environmental considerations at removal to include contamination from flood waters
  - m. Physical storage requirements including space and other considerations such as exposure to elements (sunlight, temperature, acid rain, etc.) Storage space requirements should be provided for a volume of the vendors product that is required to protect a 1000 foot long section with 3 feet of water against it
  - n. Seepage through section joints for a 1000 foot long section with 3 feet of water against it
  - o. Seepage through product barrier for a 1000 foot long section with 3 feet of water against it
  - p. Fill requirements
  - q. Detailed cost and time estimate to construct a 1000-foot long section that would hold back 3 feet of water against it based on Federally published labor costs for the Vicksburg, MS area.
- (2) The Vendor's proposal must provide engineering details about the barrier structure to show that the structure has the ability to withstand hydrostatic and uplift forces, has adequate anchoring, and provides a factor of safety against sliding and over-turning with 3 feet of water against it (to include if anchoring is provided). The vendor should provide an engineering opinion as to the performance of

his product against debris and wave impact and resistance to tearing or breaking during installation and removal.

- (3) Documentation shall be furnished as to how the barrier structure will perform on a freshly graded surface, a grass surface, and a finished concrete surface. Both the freshly graded surface and the grass surface will be present at the field test site. For the laboratory testing, the structure will be constructed on finished concrete.
- (4) The vendor must provide sufficient details for plans of how to repair and maintain their barrier structure during the field test process.
- (5) The vendor must provide documentation as to how their barrier structure will perform against three feet of water against it. They will also have to show in sufficient detail how they will raise the level of their structure by whatever means possible to protect against an additional 1 foot of floodwater during the field-testing process.

9. Field Test Site Photos.



Photo 1: Test Site With Mississippi River At A Stage Of Approximately 27 Feet On The Vicksburg Gage



Photo 2: Test Site With Mississippi River At A Stage Of Approximately 34 Feet On The Vicksburg Gage



Photo 3: Aerial View of Test Site

(End of Summary of Changes)

**W912HZ-04-T-0019  
FLOOD BARRIER**

<b><u>ITEM NO</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QTY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT PRICE</u></b>	<b><u>AMOUNT</u></b>
0001	Furnish and provide advisory services for installing and removing flood barrier at the Vicksburg site in accordance with attached scope of work.	1	LS	FOR	\$ _____
0002	<b>Optional/Item.</b> Furnish and provide advisory services for installing and removing flood barrier for up to 5 additional optional test sites in accordance with scope of work.				To Be Determined Later
0003	<b>Optional/Item.</b> Of the 5 optional sites, the Government will purchase product for testing purposes. Actual quantity purchased and cost of product will be determined as sites are identified.				To Be Determined Later

**NOTE:** For Line Items 0001-0003, see paragraph 6 of the Scope of Work for additional cost information.